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Review Article

A PHARMACOLOGICAL AND THERAPEUTIC PLANT REVIEW OF *BHALLATAKA* (*SEMECARPUS ANACARDIUM*) IN CLASSICAL AND MODERN MEDICINE

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ABSTRACT

Bhallataka (*Semecarpus anacardium* Linn.), commonly known as the marking nut tree, is a widely utilized medicinal plant in *Ayurveda*, recognized for its diverse pharmacological activities. Classical *Ayurvedic* texts such as *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and various *Nighantus* extensively document its properties, formulations, and therapeutic indications. It is classified under *Upavisha* (semi-poisonous drugs), requiring meticulous purification (*Shodhana*) before internal use. Various parts of the plant-particularly the seed, kernel (*Majja*), fruit, and oil-exhibit actions such as *Deepana*, *Pachana*, *Krimighna*, *Shukrala*, *Rasayana*, and *Kaphavatahara*. These properties make *Bhallataka* valuable in treating conditions like *Kushtha* (skin disorders), *Arsha* (piles), *Grahani* (IBS), *Gulma* (abdominal masses), *Pandu* (anaemia), and *Vatarakta* (gout). Modern pharmacological research has corroborated many classical claims, demonstrating its anti-inflammatory, immunomodulatory, antimicrobial, antioxidant, and anticancer effects. Phytochemical investigations reveal bioactive constituents like bhilawanol, semecarpol, anacardol, and biflavonoids responsible for its therapeutic efficacy. Despite its efficacy, improper handling may cause severe toxic reactions; hence, traditional antidotes and dietary guidelines (*Pathya-Apathya*) are crucial during administration. This review compiles comprehensive information from classical and contemporary sources to present a holistic understanding of *Bhallataka*-from its botanical description, purification techniques, therapeutic actions, and formulations to modern evidence-based validations highlighting its integrative significance in traditional and modern medicine.

INTRODUCTION

Semecarpus anacardium Linn, widely recognized in *Ayurveda* as *Bhallataka*, is a potent medicinal plant revered for its diverse therapeutic applications.[1] Belonging to the family *Anacardiaceae*, it is traditionally known by various regional names including marking nut, dhobi nut, *Bhilawa*, and *Biba*.[2] Its medicinal utility is well-documented across ancient Ayurvedic scriptures and has been practiced across India for centuries. The plant's rapid and powerful action is attributed to its *Ushna Virya* (hot potency), *Laghu* (light), and *Tikshna* (sharp) properties, making it suitable for conditions requiring strong metabolic stimulation.[3]

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Bhallataka finds extensive mention in the classical Ayurvedic texts, such as the *Charaka Samhita*, which outlines numerous therapeutic formulations involving its use. Similarly, *Sushruta Samhita* elaborates on the properties and usage of its fruits, receptacles, and medicated oils in the management of various disorders.[4] It is traditionally employed both externally and internally in the treatment of ailments like *Arsha* (piles), *Kushta* (skin diseases), and chronic inflammatory conditions.

Being categorized under *Upavisha* (semi-poisonous drugs) in *Ayurvedic* pharmacopeia, *Bhallataka* must be subjected to a detoxification process known as *Shodhana Samskara* prior to its medicinal use.[5] This essential procedure not only reduces the inherent toxicity of the seed but also potentiates its therapeutic efficacy. Commonly employed *Shodhana* methods include soaking in cow's milk, lime water, or other herbal decoctions that help neutralize its dermotoxic and gastrointestinal irritant

effects. Post purification, the drug becomes safe and more efficacious for human administration.[6]

Numerous classical formulations incorporating *Bhallataka* are found in treatises like *Bhaishajya Ratnavali*, where it is used for a wide array of disorders such as digestive issues, metabolic diseases, skin disorders, and autoimmune conditions.[7] These texts also recommend specific dietary regimens and precautionary measures during the course of *Bhallataka* therapy to prevent adverse reactions, such as avoiding exposure to excessive heat and the consumption of spicy or irritant foods.[8] The co-administration of antidotes such as *Ghee*, *Chandana*, or milk-based preparations is also emphasized to balance its heating properties.[9]

In recent decades, scientific investigations have validated many of the traditional claims surrounding *Semecarpus anacardium*. Studies have revealed its pharmacological potential including anti-inflammatory, antioxidant, immunomodulatory, and antimicrobial effects. Modern phytochemical analysis has identified several bioactive constituents such as bhilawanol, semecarpol, and various phenolic compounds responsible for its medicinal actions.[10] This review aims to compile and present a holistic overview of *Bhallataka*, encompassing its classical references, pharmacological potential, methods of collection and purification, therapeutic precautions, and current scientific validations.[11]

Material and Method

A meticulous literature survey on *Bhallataka* was undertaken by examining primary *Ayurvedic* treatises, especially the classical *Samhita* and *Sangraha* texts, along with standard *Nighantu* compilations. Important works of *Rasashastra* such as *Rasarnava*, *Rasaratna Samucchaya*, *Rasendra Sara Sangraha*, *Rasa Tarangini*, *Yoga Tarangini*, and *Rasamanjari* were also referred to for detailed information. The content collected from these sources was thoroughly analyzed and systematically arranged to cover various aspects including its synonyms, classical categorization, pharmacological properties, therapeutic actions, clinical indications, formulations, dosage forms, and routes of administration.

Plant Description

Bhallataka (*Semecarpus anacardium* Linn.), commonly referred to as the "marking nut tree," is a medium to large-sized deciduous tree of immense medicinal importance in *Ayurveda*. Traditionally used for centuries, its therapeutic relevance is well documented in classical texts like *Charaka Samhita*, *Sushruta Samhita*, and several *Nighantus*.[12] It is considered a semi-poisonous drug due to its acrid oil content, which requires *Shodhana* (purification) before administration. The plant is utilized in the treatment of a wide array of disorders including *Kushtha* (skin diseases), *Arsha* (piles), *Grahani* (IBS), and *Vatarakta* (gout). Various parts of the plant such as the fruit, nut, seed kernel (*Majja*), stalk (*Vrinta*), and bark are pharmacologically active and display properties like *Deepana*, *Pachana*, *Shukrala*, *Krimighna*, and *Medhya* actions. It is well recognized in Indian traditional systems for both internal and external therapeutic applications.[13]

Table 1: Vernacular Names

Language	Name
Sanskrit	*Bhallataka*, *Arushkara*
Hindi	Bhilawa, Biba
Marathi	Bibba
Bengali	Bhela
Gujarati	Bhela, Bhilamo
Tamil	Shenbagam, Seruppadi
Telugu	Jeedi Ginja
Kannada	Geru Beeja
Malayalam	Pilava, Serupadi
English	Marking nut

Table 2: Botanical Classification

Category	Description
Kingdom	Plantae
Subkingdom	Tracheobionta (Vascular plants)
Division	Magnoliophyta (Angiosperms)

Class	Magnoliopsida (Dicots)
Order	Sapindales
Family	Anacardiaceae
Genus	*Semecarpus*
Species	*Semecarpus anacardium* Linn.

Table 3: Synonyms of *Bhallataka* and Their Traditional Classification

Synonym	Classification Basis	Literal Sense / Traditional Rationale
Bhallataka, *Bhalli*	Pharmacognostical	Medium-large tree with an acrid, irritant latex
Arushkara	Pharmacognostical	"Blister former" – raises vesicles on contact
Tailabeeja, *Snehabeeja*, *Bhurisneha*	Pharmacognostical	Seeds exceptionally rich in fixed oil
Dhanurbeeja	Pharmacognostical	Fruit resembles an obliquely-set arrowhead
Vatari	Based on Karma (Action)	Pacifies *Vata* disorders
Ranjaka	Based on Karma	Used for marking cloth and scriptures
Shophakara	Based on Karma	Capable of producing swelling if used unprocessed
Krimighna	Pharmacological	Anthelmintic, destroys intestinal parasites
Arshohita	Pharmacological	Traditionally prescribed for *Arsha* (piles)
Bhedana	Pharmacological	Possesses resolvent action in *Arbuda* (tumours)
Agnika, *Jwalamukhi*, *Dahana*, *Agni*, *Anala*, *Agnimukhi*	Miscellaneous	Causes burning comparable to fire, hence fiery epithets

Table 4: Classical Groupings of *Bhallataka* in Major Texts

S.No.	Source (*Samhita / Nighantus*)	Group(s) or *Gana/Varga* Mentioned
1	*Sushruta Samhita*	*Nyogrodhadi Gana*, *Mustadi Gana*, *Kashaya Varga*, *Phala Varga*
2	*Astanga Sangraha*	*Dipaniya Gana*, *Kushtaghna Gana*, *Mutrasangrahana Gana*, *Taila Varga*, *Shaka Varga*, *Phala Varga*
3	*Astanga Hridaya*	*Nyogrodhadi Gana*, *Mustadi Gana*, *Katu Skandha*, *Phala Varga*
4	*Dhanvantari Nighantu*	*Chandanadi Varga*, *Upavisha Varga*
5	*Shodhala Nighantu*	*Chandanadi Varga*, *Anekartha Varga*
6	*Madanapala Nighantu*	*Abhayadi Varga*
7	*Kaiyadeva Nighantu*	*Aushadhi Varga*
8	*Bhavaprakasha Nighantu*	*Haritakyadi Varga*
9	*Raja Nighantu*	*Amradi Varga*

Geographical Distribution

The plant is commonly found in dry deciduous forests, especially in the states of Maharashtra, Madhya Pradesh, Chhattisgarh, Odisha, Kerala, Tamil Nadu, Andhra Pradesh, and Karnataka.[14]

Macroscopic Study (According to API)

- Fruit: Obliquely ovoid drupe, 2–5 cm in length, black and shining with a hard seed inside.
- Epicarp: Smooth, dark, and leathery.
- Mesocarp: Fleshy, oily, and acrid.
- Odour: Slightly acrid
- Taste: Acrid, bitter, and irritating

Microscopic Study (According to API)

- Mesocarp: Rich in oil globules and resin cells.
- Seed Coat: Shows thick-walled sclereids and pigment cells.

Table 5: Chemical Constituents

Compound Name	Chemical Nature	Biological Role / Effect
Bhilawanol	Phenolic compound	Irritant, vesicant, anti-inflammatory
Semecarpol	Monohydroxy phenol	Immunomodulatory, antimicrobial
Anacardol	Alkyl catechol	Antioxidant, anti-inflammatory, antitumor
Biflavonoids	Flavonoid derivatives	Antioxidant, antiaging
Cardol	Phenolic lipid	Anti-arthritic, cytoprotective
Fatty acids	Saturated and unsaturated	Nutritional and supportive action
Tannins	Polyphenolic compounds	Astringent, antimicrobial
Glycosides	Natural plant sugars	Mild laxative, adaptogenic

Table 6: Organoleptic and Pharmacodynamic Properties in Five Nighantus

Property	*Bhavaprakasha*	*Dhanvantari*	*Raja*	*Kaiyadeva*	*Madanapala*
Rasa	*Kashaya*, *Madhura*	*Katu*, *Tikta*, *Madhura*	*Katu*, *Tikta*, *Kashaya*	*Tikta*, *Kashaya*, *Madhura*	*Kashaya*, *Madhura*
Guna	*Laghu*			*Laghu*	*Laghu*
Veerya	*Ushna*	*Ushna*	*Ushna*	*Sheeta*	*Ushna*
Vipaka			*Katu*		
Karma	*Shukrala*			*Grahi*, *Dipana*	*Shukrala*

Pathya* and *Apathya

Ayurvedic physicians advise a clear dietary code while administering *Bhallataka*.

- **Avoid (Apathya)** - *Kulatha* (horse-gram), *Dadhi* (curd), *Sukta* (fermented sour gruel), oil massage (*Taila Abhyanga*), and all forms of intense heat exposure or fire therapy (*Agnisevana*).[15]
- **Prefer (Pathya)** - fresh milk, well-cooked rice, and cow ghee, which soothe the gastro-intestinal tract and moderate the drug's pungency.[16]

Table 7: Therapeutic Applications of Various Parts of *Bhallataka*

Plant Part	Indications	Source
Bhallataka (general use)	*Vibandha*, *Kaphaja Roga*, *Udara*, *Anaha*, *Kushtha*, *Arsha*, *Grahani*, *Gulma*, *Jvara*, *Shvitra*, *Vrana*, *Agnimandya*, *Krimi*	*Bhavaprakasha Nighantu* (BPN)
Bhallataka Phala	*Vrana*, *Udara*, *Kushtha*, *Arsha*, *Grahani*, *Gulma*, *Shopha*, *Anaha*, *Jvara*, *Krimi*	*Bhavaprakasha Nighantu* (BPN)
Bhallataka Majja	*Daha*, *Arochaka*	*Raja Nighantu* (RN)
Bhallataka Asthi	*Vrana*, *Udara*, *Kushtha*, *Arsha*, *Grahani*, *Gulma*, *Shopha*, *Anaha*, *Jvara*, *Krimi*	*Kaiyadeva Nighantu* (KDN)

Classical *Bhallataka* Formulations and Their Uses

1. ***Bhallatakadi Modaka*:** Prescribed for *Pleeha Vriddhi* (splenic enlargement) and *Pittaja Arsha* (bleeding piles).
2. ***Bhallatakavaleha Brihata*:** Reputed to alleviate *Arsha* and many chronic disorders.
3. ***Bhallatakadi Kwatha*:** Recommended for *Urustambha* (thigh muscle stiffness).
4. ***Bhallataka Ghrita Prathama*:** Useful in *Gulma* (abdominal mass), *Pandu* (anaemia), *Shwasa* (dyspnoea), *Grahani* (irritable bowel), and *Kasa* (cough).
5. ***Bhallatakadi Ghrita Dwitiya*:** Indicated for *Gulma* and *Raktagulma* (blood-filled cystic growth).
6. ***Bhallatakadya Taila*:** Applied for chronic sinus tracts (*Nadivrana*) and benign glandular swellings (*Apachi*).
7. ***Bhallatakadi Lepa*:** External paste for *Indralupta* (alopecia).
8. ***Amrita Bhallataka*:** Rasāyana formulation for systemic rejuvenation and all varieties of *Kushtha* (skin diseases).
9. ***Mahabhallataka Guda*:** Broad-spectrum recipe for *Shwitra* (vitiligo), *Pama* (scabies), *Vatarakta* (gout),

Arsha, *Bhagandara* (fistula-in-ano), *Amavata* (rheumatoid arthritis), and related conditions.

10. ***Sanjivani Vati*:** Classical antidotal pill for stubborn *Ajirna* (indigestion), *Gulma*, and *Visuchika* (acute gastro-enteritis).
11. ***Bhallataka Rasayana*:** General tonic that augments strength and corrects *Raktalpata* (iron-deficiency anaemia).
12. ***Bhallatakarishtha*:** Fermented preparation for dropsy, abdominal distension, fistulous tracts, duodenal disorders, and certain forms of leprosy.

Table 8: Pharmacological Actions

S.No.	Action	Classical Indication	Modern Correlation
1	*Deepana*	Stimulates digestive fire	Digestive stimulant
2	*Pachana*	Digests *Ama* (toxins)	Carminative, detoxifying
3	*Shukrala*	Promotes reproductive strength	Aphrodisiac, fertility enhancer
4	*Krimighna*	Destroys intestinal worms	Anthelmintic
5	*Kaphavatahara*	Pacifies *Kapha* and *Vata*	Anti-inflammatory, analgesic
6	*Medhya*	Enhances intellect and memory	Nootropic, neuroprotective
7	*Rasayana*	Rejuvenative, promotes longevity	Adaptogenic, immunomodulator
8	*Bhedana*	Resolvant for masses and abscesses	Cytolytic, anti-tumor
9	*Chedana*	Helps in liquefying and breaking hardened tissues	Expectorant, tissue softener
10	*Balya*	Strength-giving	Tonic, anabolic
11	*Brimhana*	Nourishing action	Nutritive, anabolic
12	*Grahi*	Absorptive, controls loose motions	Antidiarrheal
13	*Keshya*	Promotes hair growth	Trichogenic
14	*Vedanasthapana*	Pain-relieving	Analgesic
15	*Kushthaghna*	Cures skin diseases	Antimicrobial, dermatoprotective
16	*Shothahara*	Reduces swelling and inflammation	Anti-inflammatory
17	*Vranaropaka*	Heals wounds	Wound healing, tissue repair
18	*Raktaprasadaka*	Purifies and strengthens blood	Hematinic, detoxifier
19	*Arshoghna*	Treats piles (*Arsha*)	Anti-haemorrhoidal
20	*Agnivardhaka*	Enhances metabolic fire	Metabolic enhancer

Good Collection and Storage Practices for *Bhallataka*

- *Ayurveda* assigns great importance to procuring botanicals that are genuine, potent, and free from blemish. For *Bhallataka* (*Semecarpus anacardium*) the recommended selection criteria are clear: gather only fully mature fruits that display complete flavor and vitality (*Paripakva*, *Poornarasa*, *Poornavirya*), are intact (*Anupahata*), disease free (*Anamaya*), and of proper size (*Poornapramana*).[17] Ideal specimens resemble ripe *Jambu* fruit in color and weight and should be collected after they fall naturally with the wind (*Pavanahata*), never plucked directly from the tree (*Anyahrita*). A traditional test for quality is to immerse the harvested nuts in water; those that sink are preferred (*Nirakshiptam Nimajjati*).[18]
- Classical texts also prescribe precise seasons. *Charaka Samhita* and *Astanga Sangraha* advise gathering during the months of *Shuci Jyestha* and *Shukra Ashadha* (roughly May to July) and then employing the drug after it has rested until *Saha Agrahayana* (November–December). *Astanga Hridaya* echoes this guidance, specifying collection in the summer (*Grishma Ritu*) and therapeutic use in winter (*Hemanta Ritu*). Once collected, the fruits are traditionally stored for four months buried in heaps of barley, black gram, or other grains, which helps moderate their acridity while preserving potency.[19]
- Because the raw juice is highly irritant, careless handling can lead to serious adverse effects. Even a trace of the sap on skin produces intense burning (*Daruna Daha*) and can progress to ulceration (*Vrana*); contact with the face may provoke marked swelling (*Shotha*) accompanied by severe discomfort.[20] *Charaka Samhita* explicitly lists exposure to *Bhallataka* flowers and fruits as a cause of external inflammatory swellings (*Agantuja Shotha*). Strict adherence to proper collection,

curing, storage, and handling protocols therefore remains essential for unlocking the therapeutic benefits of this powerful plant while avoiding its well-known hazards.[21]

Shodhana (Purification) of *Bhallataka*

- In *Ayurveda* the concept of *Shodhana* mandates that poisonous or semipoisonous botanicals undergo specific cleansing procedures to neutralise toxicity and enhance therapeutic potency. Accordingly, several methods are prescribed for *Bhallataka* (*Semecarpus anacardium*) prior to internal use. Modern pharmacognostic studies confirm that these processes lower irritant constituents while raising desirable bioactives; thin-layer chromatography, for instance, shows altered Rf patterns in methanolic extracts of purified fruits, with anacardol levels markedly higher than in the raw material[22]. The detoxifying media—such as cow urine, milk, or brick powder—also capture and remove vesicant compounds, rendering the drug safer for consumption[23].
- **Method I** Whole fruits are bundled with fine brick powder in a cloth *pottali*. Gentle hand-rubbing continues until the brick powder turns oily and the epicarp loosens. The fruits are then washed thoroughly in hot water and dried before storage.[24]
- **Method II** After detaching the persistent thalamus, fruits are immersed in *Gomutra* for seven days, followed by seven days in fresh *Go Dugdha*. The softened seeds are next placed in a coarse brick-powder sack and rubbed to draw out residual oil, then rinsed in hot water and shade-dried.[25]
- **Method III** In parts of southern India, traditional practice involves frying the fruit lightly to achieve detoxification before any further pharmaceutical processing[26] These procedures illustrate how carefully chosen media, duration, and mechanical actions jointly transform *Bhallataka* from a caustic irritant into a reliably potent therapeutic agent while minimizing adverse reactions.

Antidotes for *Bhallataka*-Induced Toxicity

- Classical *Ayurvedic* literature provides a well-defined system of antidotes (*Prativisha*) to counteract the adverse effects of various poisonous and semi-poisonous substances, including *Bhallataka* (*Semecarpus anacardium*). Several herbs and formulations have been traditionally indicated to neutralise the dermal, mucosal, and systemic toxicity of this potent medicinal plant.[27]
- According to *Basavarajeeyam*, two important antidotes recommended specifically for countering *Bhallataka*-related toxicity are the flowers of *Palasha* (*Butea monosperma*) and the seeds of *Kapikacchu* (*Mucuna pruriens*). These are traditionally used to mitigate internal toxicity and systemic reactions caused by the drug.[28]
- For managing local swelling or inflammation resulting from contact with *Bhallataka* latex, external application of a paste made from *Tila* (*Sesamum indicum*), *Dugdha* (milk), *Madhuka* (*Madhuca longifolia*), and *Navaneeta* (butter) is advised. Another effective formulation includes *Yashtimadhu* (*Glycyrrhiza glabra*), milk, and *Tila* combined with butter. Alternatively, the application of soil from beneath the *Bhallataka* tree or fresh leaves of *Shala* (*Shorea robusta*) may also reduce irritation.[29]
- A well-regarded antidotal combination involves local application of *Tila*, *Mahisha Kshira* (buffalo milk), and *Navaneeta*, which is known to relieve *Bhallataka*-induced oedema. Additionally, *Yashtimadhu*-based pastes along with milk and clarified butter are effective in controlling inflammatory responses.[30]
- Another specific antidote mentioned in classical texts for internal toxicity of *Bhallataka* is *Bibhitaka* (*Terminalia bellirica*), which helps mitigate the toxic impact and balance aggravated *Doshas*. In cases of exposure to *Bhallataka* smoke, applying the paste of *Udumbara* (*Ficus glomerata*) root bark or the stem paste of *Tinduka* (*Diospyros embryopteris*) is advised for managing resultant swelling.[31]
- As a preventive measure before internal administration of *Bhallataka*, gargling with *Ghee* (*Gandusha*) or applying *Ghee* to the lips is recommended to protect the mucous membranes and reduce the chances of irritation. These traditional antidotal measures demonstrate the depth of *Ayurvedic* pharmacovigilance in handling potent botanicals.[32]

Toxicity Profile

Direct contact with *Bhallataka* latex can provoke sharp irritation, erythema, vesicles, and painful blisters exuding acrid serum; in severe cases lesions resemble bruises that ulcerate and slough. Oral exposure produces burning pain with blistering of the lips, tongue, and pharynx, followed by nausea, vomiting, colicky abdominal pain, and diarrhoea. Systemic poisoning may manifest as hypotension, tachycardia, delirium, and coma with dilated pupils.[33]

- **Estimated lethal dose** kernel 5–10 g, whole seeds 6–8 in number, or expressed oil 9–10 mL.
- **Fatal period** twelve to twenty-four hours after massive ingestion.

Prompt use of the traditional antidotes listed above, together with modern supportive care, is essential whenever accidental poisoning is suspected.

DISCUSSION

Bhallataka (*Semecarpus anacardium Linn.*), a semi-poisonous plant described extensively in *Ayurvedic* texts, holds a significant place in the classical pharmacopeia due to its multifaceted pharmacological actions. Ancient treatises such as *Charaka Samhita*, *Sushruta Samhita*, *Ashtanga Hridaya*, and various *Nighantus* document over 80 synonyms, reflecting its wide recognition and diverse therapeutic potential. Each part of the plant *phala*, *majja*, *asthi*, and *vrinta* has unique actions, ranging from *Krimighna*, *Deepana*, *Shukrala*, and *Kaphavatahara* to *Vrishya* and *Rasayana* effects.[34] These actions have led to its inclusion in numerous compound formulations aimed at treating diseases like *Arsha*, *Kushtha*, *Grahani*, *Gulma*, *Pandu*, and *Vatarakta*. Its properties such as *Tikta*, *Kashaya*, *Ushna Virya*, and *Katu Vipaka* align it with therapeutic roles in metabolic, gastrointestinal, dermatological, and reproductive disorders.[35]

Modern research has increasingly validated the classical claims about *Bhallataka*. Various in vitro, in vivo, and clinical studies have confirmed its anti-inflammatory, antimicrobial, immunomodulatory, anticancer, and antioxidant properties. Key bioactive constituents like bhilawanol, semecarpol, and anacardol have been shown to modulate immune response, scavenge free radicals, and inhibit tumor growth.[36] In particular, processed *Bhallataka* extracts have demonstrated potential in managing arthritis, dermatitis, diabetes, and even malignancies, when appropriately formulated. These findings bridge the gap between ancient knowledge and modern therapeutic interest, supporting its potential for drug development with standardized purification and formulation protocols.[37]

Despite its therapeutic promise, the irritant and vesicant nature of *Bhallataka* necessitates stringent processing protocols before internal use. Classical *Shodhana* methods such as soaking in *Gomutra* or *Godugdha*, rubbing with brick powder, and traditional frying serve not only to detoxify but also enhance bioavailability of the active compounds.[38] Experimental evidence confirms that these purificatory methods lower the concentration of vesicant compounds while increasing therapeutic indices, especially the levels of beneficial anacardol. Additionally, antidotes like *Tila*, *Yashtimadhu*, *Dugdha*, *Navaneeta*, and *Bibhitaka* are traditionally advised to counter any adverse reactions, reaffirming the sophistication of *Ayurvedic* pharmacovigilance.[39]

CONCLUSION

Bhallataka (*Semecarpus anacardium*) occupies a central place in the *Ayurvedic* materia medica, its therapeutic merit praised across nearly all classical treatises. More than eighty traditional synonyms showcase its diverse morphology and pharmacodynamics, while individual plant parts are credited with distinct tastes, potencies, and actions. Classical authors specify rigorous guidelines for season bound harvesting, grain bed storage, systematic *Shodhana*, and the use of targeted antidotes and supportive diets so that practitioners can harness the drug's benefits without provoking its well-known irritant effects. Beyond single herb use, *Bhallataka* appears in more than twenty compound dosage forms that address an extensive range of disorders, including *Arsha*, *Kushtha*, *Gulma*, *Grahani*, *Prameha*, and *Vataroga*. Together these details affirm that careful selection, purification, and formulation transform this potent semi poisonous botanical into a versatile and reliable healing agent within the *Ayurvedic* pharmacopeia.

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